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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/802,706	03/17/2004	Huub Van Aert	27500-203	4824

7590 08/19/2005

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EXAMINER
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PEZZUTO, HELEN LEE

ART UNIT	PAPER NUMBER
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1713

DATE MAILED: 08/19/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

10/802,706

Applicant(s)

AERT ET AL

Examiner

Helen L. Pezzuto

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 2/25/05, 6/3/05.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 13-42 is/are pending in the application.
- 4a) Of the above claim(s) 35-42 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 13-19 and 24-34 is/are rejected.
- 7) ☐ Claim(s) 20-23 is/are objected to.
- 8) ☒ Claim(s) 13-42 are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

**DETAILED ACTION**

***Election/Restrictions***

1. Applicant's election of Group I, claims 13-34 in the reply filed on 6/3/05 is acknowledged. Because applicant did not distinctly and specifically point out the supposed errors in the restriction requirement, the election has been treated as an election without traverse (MPEP § 818.03(a)).
2. Claims 35-42 are withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected invention, there being no allowable generic or linking claim. Election was made **without** traverse in the reply filed on 6/3/05.

***Response to Amendment***

Applicant's amendment to claims 13-23, 28-33, and 35-42 filed in the response on 2/25/05 is acknowledged. In light of applicant's amendment and remarks, previous 101 and 112 rejections, and claim objections are hereby withdrawn.

Claims 13-34 are under consideration in this application.

***Claim Rejections - 35 USC § 103***

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at

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the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 13-19, 24-34 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nishi et al. (US-670) in view of "polymer Chemistry" by Raymond B. Seymour et al. for the reasons of record and further in view of the following remarks.

5. Claims 13-19, 24-34 rejected under 35 U.S.C. 103(a) as being unpatentable over Obayashi et al. (US-924) for the reasons of record and further in view of the following remarks.

Applicant's amendment and remarks directed to the above references have been fully considered but are not found to be persuasive. Nishi's component (D) is taught to have particle size from 0.01 to 1.0  $\mu\text{m}$  (col. 6, line 47), which clearly embraces applicants less than 90nm as amended. Regarding Obayashi et al., the examiner remains of the position that the claimed particle size is conventional in typical emulsion polymerization processes and is considered an inherent characteristic of prior art emulsion polymerized product, because identical ingredients are utilized. US-924 further discloses using 0.2-10 weight parts of anionic surfactants (col. 12, lines 44-48), fully within applicant's range. Thus, the examiner's position is maintained.

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***Claim Rejections - 35 USC § 102/103***

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. Claims 13-19, 24-34 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Suzuki et al. (US-800) or Tsuruoka et al. (US-118).

US 5,354,800 to Suzuki et al. discloses a process of producing copolymer lattices via emulsion polymerization. Specifically, prior art uses a hydrophobic chain transfer agent in the second step of the reaction.  $\alpha$ -methylstyrene dimmer is disclosed and exemplified as the chain transfer agent (col. 4, lines 44-45; Examples 3, 6, 10, 14, 15 and

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17). Suitable emulsifier includes anionic surfactants used in an amount of about 0.05-2.5 parts by weight based on the entire monomer mixture (col. 7, lines 42-66).

Similarly, US 5,444,118 to Tsuruoka et al. discloses a two-stage emulsion polymerization process for making copolymer latex in the presence of  $\alpha$ -methylstyrene as a chain transfer agent. Emulsifiers were taught to be used from 0.05-2 parts by weight, within the scope of those expressed in the present claims (col. 9, lines 12-14).

Prior art is silent regarding the instant particle size. The examiner takes the position that such characteristic is inherent in the prior art latex product because identical components are used in the emulsion polymerization process. One skilled in the polymer art would recognize 0.05  $\mu$ m (i.e. 50 nm) to be the average particle size in typical synthetic latex (see polymer textbooks, Hawley's condensed chemical dictionary, etc.). The burden is placed upon the applicant to provide clear evidence that the respective latex composition do in fact differ. In any event, the discovery of an optimum value of a result effective variable would involve only routine

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skill in the art, absent evidence of unusual or unexpected results demonstrated for the scope of the present claims.

***Allowable Subject Matter***

9. Claims 20-23 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

While WO 99/42505 discloses the synthesis of the oligomer graft copolymer expressed in these claims. There is a lack of suggestion in its utility as chain transfer agent in the context of the emulsion polymerization expressed in claim 13.

10. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will

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expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Helen L. Pezzuto whose telephone number is (571) 272-1108. The examiner can normally be reached on 8 AM to 4 PM, Monday thru Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Wu can be reached on (571) 272-1114. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

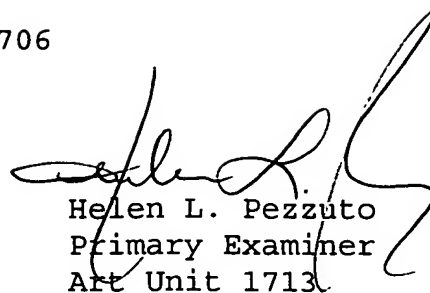
Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



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Helen L. Pezzuto  
Primary Examiner  
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